

## Refine Search

Your wildcard search against 10000 terms has yielded the results below.

***Your result set for the last L# is incomplete.***

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

### Search Results -

Terms	Documents
L45 and (((hold near2 back\$) or constrain\$ or confin\$ or restrain\$) with (vehicle or automobile or car or flight or airplane))	0

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L4 6

Refine Search

Recall Text

Clear

Interrupt

### Search History

DATE: Friday, September 15, 2006   [Purge Queries](#)   [Printable Copy](#)   [Create Case](#)

Set  
Name   Query  
 side by  
 side

Hit  
Count  
Set  
Name  
 result  
 set

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES;  
 OP=OR

<p><u>L46</u>   L45 and (((hold near2 back\$) or constrain\$ or confin\$ or restrain\$) with (vehicle or automobile or car or flight or airplane))</p> <p><u>L45</u>   l42 or l43 or l44 or l35</p> <p>DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR</p> <p>(3569819   3780343   3859624   3539900   3641421   4025791   4017780   4317068   4457285   4868730   3949397   5049786   3299424   3852656   3718853   3906919   4589398   3911433   3671963   3182930   3104478   4046961   3753071)! [PN]</p> <p><u>L44</u></p> <p><u>L43</u>   ("4121102"   "5207208"   "3919620") [PN]</p>	<p>0</p> <p>66</p> <p>23</p> <p>3</p>	<p><u>L46</u></p> <p><u>L45</u></p> <p><u>L44</u></p> <p><u>L43</u></p>
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<u>L42</u> ("4121102"  "5207208"  "3919620")[URPN]	39	<u>L42</u>
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR</i>		
<u>L41</u> L40 and (fir\$ with puls\$).clm.	3	<u>L41</u>
<u>L40</u> L39 and fet\$	17	<u>L40</u>
<u>L39</u> l37 or L38	225	<u>L39</u>
<u>L38</u> L36 and @pd<=20021126	217	<u>L38</u>
<u>L37</u> L36 and @ad<=20021126	107	<u>L37</u>
<u>L36</u> switch\$ and (capacit\$ with fir\$) and (vehicle or automobile or car or flight or airplane) and (fir\$ near2 circuit\$)	230	<u>L36</u>
<u>L35</u> L33	1	<u>L35</u>
<i>DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=OR</i>		
<u>L34</u> ("20020121810")[URPN]	0	<u>L34</u>
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR</i>		
<u>L33</u> L32	1	<u>L33</u>
<i>DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=OR</i>		
<u>L32</u> 20020121810	1	<u>L32</u>
<u>L31</u> ("20020121810")[PN]	1	<u>L31</u>
<u>L30</u> ("20020121810")[PN]	1	<u>L30</u>
<u>L29</u> ("20020121810"  "20020121810")[URPN]	0	<u>L29</u>
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR</i>		
<u>L28</u> L26 and (fir\$ near2 circuit)	1	<u>L28</u>
<u>L27</u> L26 and L17	0	<u>L27</u>
<u>L26</u> L23 or L16 or L14 or L12 or L13 or L19 or L20 or L7	10	<u>L26</u>
<u>L25</u> L8 and @ad<=20021126	0	<u>L25</u>
<u>L24</u> L8 and @pd<=20021126	0	<u>L24</u>
<i>DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=OR</i>		
<u>L23</u> L9 and capacit\$	1	<u>L23</u>
<i>DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR</i>		
<u>L22</u> L20 and fet\$	1	<u>L22</u>
<u>L21</u> L20 and fet\$	1	<u>L21</u>
<u>L20</u> 5261694.pn.	1	<u>L20</u>
<u>L19</u> US-5666065-A.did.	1	<u>L19</u>
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR</i>		
<u>L18</u> L17 and FET\$	7	<u>L18</u>
<u>L17</u> restraint\$ and (vehicle or automobile or car or flight or airplane) and (fir\$ near2 circuit)	46	<u>L17</u>
<i>DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR</i>		
<u>L16</u> 5430314.pn.	1	<u>L16</u>

*DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=OR*  
L15 L9 and restraint\$ 1 L15  
L14 20020121810 1 L14  
*DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR*  
L13 20020121810 0 L13  
L12 6878996.pn. 1 L12  
*DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=OR*  
L11 L9 and 11 1 L11  
L10 L9 and supply\$ 1 L10  
L9 20040108698 1 L9  
*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR*  
L8 L7 and (vehicle or automobile or car or flight or airplane) 0 L8  
L7 L6 and @ad<=20021126 4 L7  
L6 L4 or L5 10 L6  
L5 "reverse diode" and "N-channel FET" 6 L5  
L4 "reverse diode" and "N-type FET" 4 L4  
*DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR*  
L3 6142130.pn. 1 L3  
L2 4838457.pn. 1 L2  
L1 4838457 35 L1

END OF SEARCH HISTORY

## Hit List

First Hit

Your wildcard search against 10000 terms has yielded the results below.

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The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS				

**Search Results - Record(s) 1 through 3 of 3 returned.**

☐ 1. Document ID: US 5207208 A

L41: Entry 1 of 3

File: USPT

May 4, 1993

US-PAT-NO: 5207208

DOCUMENT-IDENTIFIER: US 5207208 A

TITLE: Integrated converter high power CD ignition

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 2. Document ID: US 4121102 A

L41: Entry 2 of 3

File: USPT

Oct 17, 1978

US-PAT-NO: 4121102

DOCUMENT-IDENTIFIER: US 4121102 A

TITLE: Object identification system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 3. Document ID: US 3919620 A

L41: Entry 3 of 3

File: USPT

Nov 11, 1975

US-PAT-NO: 3919620

DOCUMENT-IDENTIFIER: US 3919620 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Inverter adaptive lock-out technique

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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## Hit List

**First Hit**

Your wildcard search against 10000 terms has yielded the results below.

***Your result set for the last L# is incomplete.***

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**Search Results - Record(s) 1 through 10 of 17 returned.**

☐ 1. Document ID: US 6584965 B1

L40: Entry 1 of 17

File: USPT

Jul 1, 2003

US-PAT-NO: 6584965

DOCUMENT-IDENTIFIER: US 6584965 B1

TITLE: High efficiency high energy firing rate CD ignition

Full	Title	Citation	Front	Review	Classification	Date	Reference	Excluded	Attachments	Claims	KWIC	Drawn De
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☐ 2. Document ID: US 6523149 B1

L40: Entry 2 of 17

File: USPT

Feb 18, 2003

US-PAT-NO: 6523149

DOCUMENT-IDENTIFIER: US 6523149 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Method and system to improve noise analysis performance of electrical circuits

Full	Title	Citation	Front	Review	Classification	Date	Reference	Excluded	Attachments	Claims	KWIC	Drawn De
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☐ 3. Document ID: US 5734317 A

L40: Entry 3 of 17

File: USPT

Mar 31, 1998

US-PAT-NO: 5734317

DOCUMENT-IDENTIFIER: US 5734317 A

TITLE: Current limit controller for an air bag deployment system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Excluded	Attachments	Claims	KWIC	Drawn De
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☐ 4. Document ID: US 5207208 A

L40: Entry 4 of 17

File: USPT

May 4, 1993

US-PAT-NO: 5207208

DOCUMENT-IDENTIFIER: US 5207208 A

TITLE: Integrated converter high power CD ignition

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWIC	Draw D
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☐ 5. Document ID: US 5206455 A

L40: Entry 5 of 17

File: USPT

Apr 27, 1993

US-PAT-NO: 5206455

DOCUMENT-IDENTIFIER: US 5206455 A

TITLE: Laser initiated ordnance systems

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWIC	Draw D
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☐ 6. Document ID: US 5191499 A

L40: Entry 6 of 17

File: USPT

Mar 2, 1993

US-PAT-NO: 5191499

DOCUMENT-IDENTIFIER: US 5191499 A

TITLE: Method and apparatus for current interruption in electrically-powered apparatus and equipment

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWIC	Draw D
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☐ 7. Document ID: US 4990884 A

L40: Entry 7 of 17

File: USPT

Feb 5, 1991

US-PAT-NO: 4990884

DOCUMENT-IDENTIFIER: US 4990884 A

TITLE: Method and apparatus for testing an airbag restraint system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWIC	Draw D
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☐ 8. Document ID: US 4835513 A

L40: Entry 8 of 17

File: USPT

May 30, 1989

US-PAT-NO: 4835513

DOCUMENT-IDENTIFIER: US 4835513 A

\*\* See image for Certificate of Correction \*\*

TITLE: Method and apparatus for testing an airbag restraint system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachments	Claims	KWIC	Draw De
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☐ 9. Document ID: US 4623824 A

L40: Entry 9 of 17

File: USPT

Nov 18, 1986

US-PAT-NO: 4623824

DOCUMENT-IDENTIFIER: US 4623824 A

TITLE: Controlled high voltage generator

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachments	Claims	KWIC	Draw De
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☐ 10. Document ID: US 4613847 A

L40: Entry 10 of 17

File: USPT

Sep 23, 1986

US-PAT-NO: 4613847

DOCUMENT-IDENTIFIER: US 4613847 A

TITLE: Emergency signal

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachments	Claims	KWIC	Draw De
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Clear

Generate Collection

Print

Fwd Refs

Bkwd Refs

Generate OACS

Terms

Documents

L39 and fet\$

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**First Hit**

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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS				

**Search Results** - Record(s) 11 through 17 of 17 returned.

☐ 11. Document ID: US 4586715 A

L40: Entry 11 of 17

File: USPT

May 6, 1986

US-PAT-NO: 4586715

DOCUMENT-IDENTIFIER: US 4586715 A

TITLE: Toy laser pistol

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachment	Claims	KVMC	Draw D
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☐ 12. Document ID: US 4207468 A

L40: Entry 12 of 17

File: USPT

Jun 10, 1980

US-PAT-NO: 4207468

DOCUMENT-IDENTIFIER: US 4207468 A

TITLE: Object identification system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachment	Claims	KVMC	Draw D
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☐ 13. Document ID: US 4121102 A

L40: Entry 13 of 17

File: USPT

Oct 17, 1978

US-PAT-NO: 4121102

DOCUMENT-IDENTIFIER: US 4121102 A

TITLE: Object identification system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachment	Claims	KVMC	Draw D
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☐ 14. Document ID: US 3919620 A

L40: Entry 14 of 17

File: USPT

Nov 11, 1975

US-PAT-NO: 3919620

DOCUMENT-IDENTIFIER: US 3919620 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Inverter adaptive lock-out technique

Full	Title	Citation	Front	Review	Classification	Date	Reference	References	Attachments	Claims	KMIC	Draw De
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☐ 15. Document ID: US 3102166 A

L40: Entry 15 of 17

File: USOC

Aug 27, 1963

US-PAT-NO: 3102166

DOCUMENT-IDENTIFIER: US 3102166 A

TITLE: Toll ticketing telephone system

DATE-ISSUED: August 27, 1963

INVENTOR-NAME: BERCH WILLIAM H; CLEMENT MILTON A ; KAYE ROBERT K ; WILLIAM NEWITT JOHN

US-CL-CURRENT: 379/111, 379/124

Full	Title	Citation	Front	Review	Classification	Date	Reference	References	Attachments	Claims	KMIC	Draw De
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☐ 16. Document ID: US 2830125 A

L40: Entry 16 of 17

File: USOC

Apr 8, 1958

US-PAT-NO: 2830125

DOCUMENT-IDENTIFIER: US 2830125 A

TITLE: Electronic switching system

DATE-ISSUED: April 8, 1958

INVENTOR-NAME: GEORGE ELLIOTT

US-CL-CURRENT: 370/357

Full	Title	Citation	Front	Review	Classification	Date	Reference	References	Attachments	Claims	KMIC	Draw De
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☐ 17. Document ID: US 2830122 A

L40: Entry 17 of 17

File: USOC

Apr 8, 1958

US-PAT-NO: 2830122

DOCUMENT-IDENTIFIER: US 2830122 A

TITLE: Electronic telephone system

DATE-ISSUED: April 8, 1958

INVENTOR-NAME: TROUSDALE ROBERT B

US-CL-CURRENT: 370/359; 370/384, 379/290, 379/293

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	Attachments	Claims	KWIC	Draw D
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Terms

Documents

L39 and fet\$

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**Advanced Search:****Inspec - 1898 to date (INZZ)****limit**

Search history:

No.	Database	Search term	Info added since	Results	
1	INZZ	firing ADJ adj2 ADJ (capacitor OR pulse) AND restraint	unrestricted	0	-
2	INZZ	firing ADJ (capacitor OR pulse) AND restrain	unrestricted	0	-
3	INZZ	firing ADJ (capacitor OR pulse) AND (vehicle OR car OR automobile)	unrestricted	1	<a href="#">show titles</a>

[hide](#) | [delete all search steps...](#) | [delete individual search steps...](#)Enter your search term(s): [Search tips](#) ☐ Thesaurus mapping



 Information added since:  or: 
  
 (YYYYMMDD)
**search**☐ Documents with images

Select special search terms from the following list(s):

- ☒ Publication year 1950-
- ☒ Publication year 1898-1949
- ☒ Inspec thesaurus - browse headings A-G
- ☒ Inspec thesaurus - browse headings H-Q
- ☒ Inspec thesaurus - browse headings R-Z
- ☒ Inspec thesaurus - enter a term
- ☒ Classification codes A: Physics, 0-1
- ☒ Classification codes A: Physics, 2-3
- ☒ Classification codes A: Physics, 4-5
- ☒ Classification codes A: Physics, 6
- ☒ Classification codes A: Physics, 7
- ☒ Classification codes A: Physics, 8
- ☒ Classification codes A: Physics, 9
- ☒ Classification codes B: Electrical & Electronics, 0-5
- ☒ Classification codes B: Electrical & Electronics, 6-9
- ☒ Classification codes C: Computer & Control
- Classification codes D: Information Technology



Classification codes E: Mech., Manufac. & Production Engineering



Treatment codes



Inspec sub-file



Language of publication



Publication types

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0002857053 20051201.

**Title**Microprocessor based ignition controller for the **automobile** industry.**Source**

Computers in Industry, {Comput-Ind-Netherlands}, Dec. 1986, vol. 7, no. 6, p. 547-51, 0 refs, CODEN: CINUD4, ISSN: 0166-3615, Netherlands.

**Author(s)**[Mathialagan-A, Vijayaraghavan-P.](#)**Author affiliation**

Mathialagan, A., Vijayaraghavan, P., Madras Inst. of Technol., Anna Univ., India.

**Abstract**

This paper deals with the microprocessor based ignition control for an **automobile**. To get a better performance from an IC engine, accurate control of ignition timing is necessary. To effectively use the maximum pressure obtained in the engine, the **firing** instant is to be advanced before the Top Dead Centre. This method utilizes a single look-up table and a hardware counter for generating the **firing pulse**.

**Descriptors**[AUTOMOBILES](#); [COMPUTERISED-CONTROL](#); [ELECTRIC-IGNITION](#); [INTERNAL-COMBUSTION-ENGINES](#); [TABLE-LOOKUP](#).**Classification codes**[B8520B Automobile-electronics\\*](#);  
[C3340B Control-of-heat-systems\\*](#);  
[C3340H Control-of-electric-power-systems](#);  
[C7420 Control-engineering-computing](#).**Keywords**IC-engine; ignition-timing; **firing-instant**; Top-Dead-Centre; look-up-table; hardware-counter; **firing-pulse**.**Treatment codes**[P Practical](#).**Language**

English.

**Publication type**[Journal-paper](#).**Publication year**

1986.

**Publication date**

19861200.

**Edition**

1987010.

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